



August 30, 2013

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Serial No. 13-455  
LIC/JG/R0  
Docket No.: 50-305  
License No.: DPR-43

**DOMINION ENERGY KEWAUNEE, INC.**  
**KEWAUNEE POWER STATION**  
**REQUEST FOR EXEMPTION FROM 10 CFR 50.54(m)**

Pursuant to 10 CFR 50.12, Dominion Energy Kewaunee, Inc. (DEK) requests a permanent exemption from 10 CFR 50.54(m) for Kewaunee Power Station (KPS). The proposed exemption would eliminate the requirement that on-site shifts be staffed with operators licensed under 10 CFR 55 and allow on-site shifts to be staffed with certified fuel handlers and non-licensed operators. The proposed exemption is consistent with proposed changes to the KPS Technical Specifications in a license amendment request (KPS LAR-256) (Reference 1) and with the permanently shutdown and defueled status of KPS.

By letter dated February 25, 2013 (Reference 2), DEK submitted a certification to the NRC indicating its intention to permanently cease power operations at KPS on May 7, 2013, pursuant to 10 CFR 50.82(a)(1)(i). On May 14, 2013, DEK submitted a certification of permanent removal of fuel from the reactor vessel (Reference 3) pursuant to 10 CFR 50.82(a)(1)(ii). Upon docketing of these certifications, the 10 CFR Part 50 license for KPS no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel, as specified in 10 CFR 50.82(a)(2). On June 17, 2013, DEK submitted a request for NRC approval of a certified fuel handler training program (Reference 4).

10 CFR 50.54(m) specifies minimum on-site shift staffing requirements for operators licensed under 10 CFR 55, "Operators' Licenses." The scope of 10 CFR 55, states that the regulations of this part apply to any individual who manipulates the controls of any utilization facility licensed under 10 CFR Parts 50, 52, or 54. DEK no longer requires operators licensed under 10 CFR 55 because it no longer has any "controls" (as defined in 10 CFR 55.4, "Definitions").

Based on the above, DEK had initially understood that 10 CFR 50.54(m) was no longer applicable to KPS since 10 CFR 50.54(m) specifies staffing levels for operators licensed under 10 CFR 55 (which are no longer necessary). However, the NRC staff has recently verbally informed DEK that 10 CFR 50.54(m) continues to apply to facilities that have submitted a certification of permanent removal of fuel from the reactor vessel but have not received approval of a license amendment addressing shift staffing. Therefore, DEK is requesting a permanent exemption from 10 CFR 50.54(m).

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The proposed exemption is contained in the attachment to this letter. DEK requests approval of this exemption request on an expedited basis, and no later than November 30, 2013. Correspondingly, DEK also requests expedited approval of those portions of LAR-256 associated with licensed operator staffing levels (i.e., TS 5.1.2, TS 5.2.1, TS 5.2.2, TS 5.3.1, and TS 5.3.2).

Please contact Mr. Craig Sly at 804-273-2784 if you have any questions or require additional information.

Very truly yours,



Eugene S. Grecheck  
Vice President – Nuclear Engineering and Development

Attachment:

1. Request for Exemption from 10 CFR 50.54(m)

References:

1. Letter from E. S. Grecheck (DEK) to NRC Document Control Desk, "License Amendment Request 256, Permanently Defueled License and Technical Specifications," dated May 29, 2013
2. Letter from D. G. Stoddard (DEK) to NRC Document Control Desk, "Certification of Permanent Cessation of Power Operations," dated February 25, 2013. [ADAMS Accession No. ML13058A065]
3. Letter from Daniel G. Stoddard (DEK) to NRC Document Control Desk, "Certification of Permanent Removal of Fuel from the Reactor Vessel," dated May 14, 2013 (ADAMS Accession No. ML13135A209)
4. Letter from Paul A. Blasioli (DEK) to NRC Document Control Desk, "Request for Approval of Shift Manager / Certified Fuel Handler Training Program," dated June 17, 2013

Commitments made by this letter: None

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NRC Senior Resident Inspector  
Kewaunee Power Station

**ATTACHMENT 1**

**REQUEST FOR EXEMPTION FROM 10 CFR 50.54(m)**

**KEWAUNEE POWER STATION  
DOMINION ENERGY KEWAUNEE, INC.**

**Kewaunee Power Station**  
**Request for Exemption from 10 CFR 50.54(m)**

**I. DESCRIPTION OF REQUESTED EXEMPTION**

Pursuant to 10 CFR 50.12, Dominion Energy Kewaunee, Inc. (DEK) requests a permanent exemption from 10 CFR 50.54(m) for Kewaunee Power Station (KPS). The proposed exemption would eliminate the requirement that on-site shifts be staffed with operators licensed under 10 CFR 55 and allow on-site shifts to be staffed with certified fuel handlers and non-licensed operators. The proposed exemption is consistent with proposed changes to the KPS Technical Specifications in a license amendment request (Reference 1) and with the permanently shutdown and defueled status of KPS.

10 CFR 50.54(m) is restated below. A permanent exemption is being requested from this regulation in its entirety.

- (1) A senior operator licensed pursuant to part 55 of this chapter shall be present at the facility or readily available on call at all times during its operation, and shall be present at the facility during initial start-up and approach to power, recovery from an unplanned or unscheduled shut-down or significant reduction in power, and refueling, or as otherwise prescribed in the facility license.
- (2) Notwithstanding any other provisions of this section, by January 1, 1984, licensees of nuclear power units shall meet the following requirements:
  - (i) Each licensee shall meet the minimum licensed operator staffing requirements in the following table:

**Minimum Requirements<sup>1</sup> Per Shift for On-Site Staffing of Nuclear Power Units by Operators and Senior Operators Licensed Under 10 CFR Part 55**

Number of nuclear power units operating <sup>2</sup>	Position	One unit	Two units		Three units	
		One control room	One control room	Two control rooms	Two control rooms	Three control rooms
None	Senior Operator	1	1	1	1	1
	Operator	1	2	2	3	3
One	Senior Operator	2	2	2	2	2
	Operator	2	3	3	4	4
Two	Senior Operator		2	3	<sup>3</sup> 3	3
	Operator		3	4	<sup>3</sup> 5	5
Three	Senior Operator				3	4
	Operator				5	6

<sup>1</sup> Temporary deviations from the numbers required by this table shall be in accordance with criteria established in the unit's technical specifications.

<sup>2</sup> For the purpose of this table, a nuclear power unit is considered to be operating when it is in a mode other than cold shutdown or refueling as defined by the unit's technical specifications.

<sup>3</sup> The number of required licensed personnel when the operating nuclear power units are controlled from a common control room are two senior operators and four operators.

- (ii) Each licensee shall have at its site a person holding a senior operator license for all fueled units at the site who is assigned responsibility for overall plant operation at all times there is fuel in any unit. If a single senior operator does not hold a senior operator license on all fueled units at the site, then the licensee must have at the site two or more senior operators, who in combination are licensed as senior operators on all fueled units.
  - (iii) When a nuclear power unit is in an operational mode other than cold shutdown or refueling, as defined by the unit's technical specifications, each licensee shall have a person holding a senior operator license for the nuclear power unit in the control room at all times. In addition to this senior operator, for each fueled nuclear power unit, a licensed operator or senior operator shall be present at the controls at all times.
  - (iv) Each licensee shall have present, during alteration of the core of a nuclear power unit (including fuel loading or transfer), a person holding a senior operator license or a senior operator license limited to fuel handling to directly supervise the activity and, during this time, the licensee shall not assign other duties to this person.
- (3) Licensees who cannot meet the January 1, 1984 deadline must submit by October 1, 1983 a request for an extension to the Director of the Office of Nuclear Regulation and demonstrate good cause for the request.

## **II. BACKGROUND**

By letter dated February 25, 2013 (Reference 2), DEK submitted a certification to the NRC indicating its intention to permanently cease power operations at KPS on May 7, 2013, pursuant to 10 CFR 50.82(a)(1)(i). On May 14, 2013, DEK submitted a certification of permanent removal of fuel from the reactor vessel (Reference 3) pursuant to 10 CFR 50.82(a)(1)(ii). Upon docketing of these certifications, the 10 CFR Part 50 license for KPS no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel, as specified in 10 CFR 50.82(a)(2).

On May 29, 2013, DEK submitted a license amendment request (LAR-256) (Reference 1) that would change the facility license and Technical Specifications to reflect the permanently defueled status of KPS. LAR-256 included proposed changes to TS 5.2.2, "Facility Staff," that would require a minimum shift crew composition of one Certified Fuel Handler and one Non-Certified Fuel Handler. The proposed Technical Specification changes also included a requirement in TS 5.3.2 that a Certified Fuel Handler training program be maintained. On June 17, 2013, DEK submitted a request for NRC approval of a Certified Fuel Handler Training Program (Reference 4).

10 CFR 50.54(m) specifies minimum on-site shift staffing requirements for operators licensed under 10 CFR 55, "Operators' Licenses." The scope of 10 CFR 55, states that the regulations of this part apply to any individual who manipulates the controls of any utilization facility licensed under 10 CFR Parts 50, 52, or 54. 10 CFR 55.3, "License Requirements," states, "A person must be authorized by a license issued by the Commission to perform the function of an operator or a senior operator as defined in this part." In 10 CFR 55.4, "Definitions," an operator is defined as "any individual licensed under this part to manipulate a control of a facility." 10 CFR 55.4 also defines controls as "apparatus and mechanisms the manipulation of which directly affects the

reactivity or power level of the reactor.” DEK is no longer authorized to operate the reactor or place or retain fuel in the reactor vessel. Therefore, DEK no longer requires operators licensed under 10 CFR 55 because it no longer has any “controls” (as defined in 10 CFR 55.4, “Definitions”).

Based on the above, DEK concluded that 10 CFR 50.54(m) was no longer applicable to KPS since 10 CFR 50.54(m) specifies staffing levels for operators licensed under 10 CFR 55 (which are no longer necessary). However, the NRC staff recently verbally informed DEK that 10 CFR 50.54(m) continues to apply to facilities that have submitted a certification of permanent removal of fuel from the reactor vessel but have not received approval of a license amendment addressing shift staffing. Therefore, DEK is requesting an exemption from 10 CFR 50.54(m).

#### **A. Licensed operator staffing requirements at nuclear power units**

10 CFR 50.54(m) specifies minimum requirements per shift for on-site staffing of nuclear power units by operators and senior operators licensed under 10 CFR Part 55. The requirements of 10 CFR 50.54(m) were published in the Federal Register on July 11, 1983 (48 FR 31611; (Reference 5)). The summary for this final rule stated that the regulation was promulgated:

*“to require licensees of nuclear power units to provide a minimum number of licensed operators and senior operators on shift at all times to respond to normal and emergency conditions. These requirements will further assure the protection of the health and safety of the public by allowing the senior operator in charge the flexibility to move about the facility as needed while assuring that a senior operator is continuously present in the control room during unit operation.”*

The background for this rule stated that the rule implemented the recommendations of the NRC Action Plan Developed as a Result of the TMI-2 Accident (which provided interim shift staffing criteria in NUREG-0737 to all licensees of operating units). The background section states:

*“To ensure that all operating nuclear power units are adequately staffed with licensed personnel, the amendment will apply these NUREG-0737 criteria to all operating nuclear power units.”*

Although the rule does not explicitly exclude facilities that have submitted the certifications under Section 50.82(a)(1), both the basis and the rule itself are premised on “operating nuclear power units.” In addition, SECY-00-0145, “Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning” (Reference 6), discusses portions of 10 CFR 50.54 that contain licensed operator requirements with respect to decommissioning plants. The discussion in Section D of SECY-00-0145 (Staffing and Training) states the following:

*“A decommissioning plant is clearly not “operating” and no manipulation of controls that affect reactor reactivity or power can occur at a permanently defueled reactor. Therefore, the regulations that require specified licensed operator staffing for operating reactors are not applicable to a decommissioning plant.”*

SECY-00-0145 recommended that the existing rule regarding licensed operator staffing at decommissioning facilities be clarified. The recommendation is as follows:

*“Clarify that licensed operators are not required for permanently shutdown and defueled reactors.”*

A report transmitted by NRC memorandum (Reference 7) regarding applicability of Title 10 of the Code of Federal Regulations to decommissioning nuclear power plants contains discussion regarding whether licensed operators are required for permanently shutdown and defueled facilities. The discussion states that while 10 CFR 50.54(m) is applicable to all licenses, “the applicability of this subsection appears to apply to plant operation.” The memorandum also states that “once the fuel has been permanently removed from the reactor vessel, the applicability of this regulation becomes less apparent.” The applicability of 10 CFR 50.54(m) is also addressed in the discussion regarding Part 55, “Operators’ Licenses,” which states, “the regulations of this part are deemed to be applicable to decommissioning plants as long as licensed operators are used by the decommissioning plant for staffing.” This position is logical, in that the regulation governing licensed operators (Part 55) should remain applicable to facilities that rely on licensed operators. Conversely, once a facility no longer relies on licensed operators, Part 55 would no longer apply.

KPS is a single unit facility. For a facility containing a single nuclear power unit that is not operating, the Table in 10 CFR 50.54(m)(2)(i) requires one Senior Operator and one Operator on-site per shift, each of whom is licensed under 10 CFR Part 55. Footnote 2 of the Table in 10 CFR 50.54(m)(2)(i) considers a unit to be operating when it is in a mode (as defined by the unit's technical specifications) other than cold shutdown or refueling. KPS TS Section 1.1, “Definitions” defines MODE as follows:

*“A MODE shall correspond to any one inclusive combination of core reactivity condition, power level, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel.”*

DEK is not authorized to operate the reactor or place or retain fuel into the reactor vessel. Therefore, KPS is not in a mode defined by its Technical Specifications and cannot enter a mode defined by its Technical Specifications in the future. Shift staffing with operators licensed under 10 CFR 55 is no longer necessary to meet 10 CFR 50.54(m) requirements.

KPS TS 5.2.2, “Facility Staff,” currently contains administrative controls for shift crew composition that are consistent with the requirements of 50.54(m). DEK submitted proposed changes to TS 5.2.2 in LAR-256. The proposed changes would require a

minimum shift crew composition of one Certified Fuel Handler and one Non-Certified Operator. Therefore, the number of required positions to be staffed will remain the same as specified in 10 CFR 50.54(m). LAR-256 also proposed changes to KPS Technical Specification 5.3.2 that would require an NRC approved training and retraining program for Certified Fuel Handlers (CFHs) be maintained. DEK submitted a CFH training program to NRC for review and approval on June 17, 2013 (Reference 4). The proposed qualification requirements of the two administratively required individuals are commensurate with the scope of activities needed for safe management of irradiated fuel at a permanently defueled facility.

## **B. Reduced scope and severity of radiological accidents at KPS**

Section 14 of the KPS Updated Safety Analysis Report (USAR) described the design basis accident (DBA) scenarios that were applicable to KPS during power operations. During normal power operations, the forced flow of water through the reactor coolant system (RCS) removed the heat generated by the reactor core. The RCS, operating at high temperatures and pressures, transferred this heat through the steam generator tubes to the secondary system. The most severe postulated accidents for operating nuclear power plants involve damage to the reactor core and the release of large quantities of fission products to the reactor coolant system. Many of the USAR accident scenarios for operating plants involve failures or malfunctions of systems which could affect the reactor core.

DEK plans to decommission KPS using a SAFSTOR method in which most fluid systems are drained and the plant is left in a stable condition until final decontamination and dismantlement activities begin. The irradiated fuel will be stored in the spent fuel pool (SFP) and in the Independent Spent Fuel Storage Installation (ISFSI) until it is shipped off site sometime in the future. The reactor, RCS and secondary system are no longer in operation and have no function related to the safe storage and management of irradiated fuel.

Since all fuel has been permanently removed from the reactor vessel, the postulated accidents involving failure or malfunction of the reactor, RCS or secondary system are no longer applicable. The postulated accidents that remain applicable to KPS in the permanently defueled condition are a fuel handling accident (FHA) in the auxiliary building where the SFP is located, an accidental release of waste liquid, or an accidental release of waste gas. The waste gas tanks have been purged. Therefore, a rupture of the associated waste gas storage system components is no longer an applicable initiator or source of such an accident. Since waste liquids are only of concern if they contain gases with a potential to be volatilized; and since there are no longer dissolved radioactive gases onsite with the potential for being volatilized while waste liquid is being stored or processed for discharge; waste liquids are also no longer a source of such an accident.

A revised FHA analysis was developed to address the permanently defueled condition. The analysis determined a reasonable time post-cessation of operations for movement

of fuel from the spent fuel pool during which, if a fuel handling accident occurs, dose consequences would not exceed the limits of the Environmental Protection Agency (EPA) Protective Actions Guidelines (PAGs) at the exclusion area boundary (EAB). The analysis assumes spent fuel pool decontamination based on 23 feet of water over the failed fuel assembly, no credit for emergency ventilation or filtration (control room or otherwise) and no credit for control room atmospheric dispersion for a bounding upper limit of acceptable control room unfiltered inflow.

The revised FHA analysis shows that the dose consequences are acceptable without relying on any systems, structures, or components (SSCs) to remain functional during and following the event (following 90 days of irradiated fuel decay time after reactor shutdown<sup>1</sup> and compliance with the spent fuel pool water level requirements of Technical Specification TS 3.7.13).

The Updated Safety Analysis Report (USAR) has been revised to reflect the new limited accidents (consistent with the description that was included in LAR-256 (Reference 1)).

### **C. Summary**

DEK is requesting a permanent exemption from the requirements of 10 CFR 50.54(m) for KPS. The exemption would eliminate the requirement that on-site shifts be staffed with operators licensed under 10 CFR 55 and allow on-site shifts to be staffed with certified fuel handlers and non-licensed operators. DEK is no longer authorized to operate KPS or place or retain fuel in the reactor vessel. As such, it is no longer possible for any "apparatus and mechanisms" to "directly affect the reactivity or power level of the reactor." Consequently, there is no longer a requirement for operators licensed under 10 CFR 55, and; consistent with 10 CFR 55.2, this regulation (Part 55) no longer applies to KPS. DEK has submitted an associated license amendment request that would incorporate minimum staffing requirements for Certified Fuel Handlers into the KPS Technical Specifications. These proposed Technical Specification requirements will specify appropriate on-site shift manning and associated training requirements for KPS.

The underlying purpose of 10 CFR 50.54(m) is to ensure that operating nuclear power units are adequately staffed with operators licensed under 10 CFR 55. The requirements in 10 CFR 50.54(m) were developed in response to the TMI-2 accident taking into consideration the risks associated with operation of a nuclear power reactor licensed to operate at its full power level. These risks include the potential for a reactor accident with offsite radiological dose consequences. KPS is a permanently defueled facility. As such, there are no design basis accidents or other credible events for KPS that would result in a radiological dose beyond the exclusion area boundary that would exceed the Environmental Protection Agency's (EPA) Protective Action Guidelines (PAGs).

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<sup>1</sup> KPS was shutdown on May 7, 2013. Therefore, 90 days of irradiated fuel decay time elapsed on August 5, 2013.

#### **D. Precedence**

The proposed exemption is consistent with past treatment of other permanently defueled nuclear facilities in the U.S. (e.g., Millstone 1 and Zion). These facilities rely on administrative controls to establish on-site shift staffing requirements and the controls specify the use of certified fuel handlers and non-licensed operators.

### **III. JUSTIFICATION FOR EXEMPTIONS AND SPECIAL CIRCUMSTANCES**

10 CFR 50.12 states that the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of Part 50 which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the defense and security. 10 CFR 50.12 also states that the Commission will not consider granting an exemption unless special circumstances are present. As discussed below, this exemption request satisfies the provisions of Section 50.12.

#### **A. The exemptions are authorized by law**

10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50. The proposed exemptions would not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemptions are authorized by law.

#### **B. The exemptions will not present an undue risk to public health and safety**

The underlying purpose of 10 CFR 50.54(m) is to ensure that operating nuclear power units are adequately staffed with licensed personnel. It is no longer possible for the radiological consequences of design basis accidents or other credible events at KPS to exceed the limits of the Environmental Protection Agency (EPA) Protective Actions Guidelines (PAGs) at the exclusion area boundary (EAB). Therefore, there is no longer a need for operators and senior operators licensed pursuant to 10 CFR 55 to be on shift at all times to respond to normal and emergency conditions. Based on the significantly reduced consequences of radiological events still possible at KPS, such actions can be adequately performed by an equivalent number of certified fuel handlers and non-licensed operators. Requirements for minimum shift staffing and for maintaining an NRC-approved Certified Fuel Handler training program will be contained in the KPS Technical Specifications. Therefore, the underlying purpose of the regulation will continue to be met and the exemption will not present an undue risk to the public health and safety.

### **C. The exemptions are consistent with the common defense and security**

There is no longer a need for operators and senior operators licensed pursuant to Part 55 to be on shift at all times to respond to normal and emergency conditions. Based on the significantly reduced consequences of radiological events still possible at the site, such actions can be adequately addressed by an equivalent number of certified fuel handlers and non-licensed operators. Required shift staffing numbers are not being reduced from that previously required by 10 CFR 50.54(m), only the requirement for the on-shift staff to be licensed pursuant to Part 55 is being eliminated. Requirements for minimum shift staffing and for maintaining an NRC-approved Certified Fuel Handler training program will be contained in the plant KPS Technical Specifications.

Eliminating the requirement that on-site shift personnel be licensed pursuant to 10 CFR 55 will not adversely affect DEK's ability to physically secure the site or protect special nuclear material. Physical security measures at KPS are not affected by the requested exemption. Therefore, the proposed exemptions are consistent with the common defense and security.

### **D. Special Circumstances**

Pursuant to 10 CFR 50.12(a)(2), the NRC will not consider granting an exemption to its regulations unless special circumstances are present. DEK believes that special circumstances are present as discussed below.

#### **1. Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. (10 CFR 50.12(a)(2)(ii))**

The underlying purpose of 10 CFR 50.54(m) is to ensure that operating nuclear power units are adequately staffed with licensed personnel. The requirements in 10 CFR 50.54(m) were developed in response to the TMI-2 accident taking into consideration the risks associated with operation of a nuclear power reactor at its licensed, full-power level. These risks include the potential for a reactor accident with offsite radiological dose consequences.

KPS is a permanently defueled facility. The radiological consequences of accidents possible at KPS are substantially lower than those at an operating plant. Because of the significantly reduced consequences of radiological events still possible at the site, the scope of operator actions and corresponding requirements for operator staffing levels may be accordingly reduced. Thus, the underlying purpose of the regulations will not be adversely affected by eliminating the requirements that licensed operators fulfill on-site staffing requirements. All necessary activities can be appropriately fulfilled by certified fuel handlers and non-licensed operators.

There are no design basis accidents or other credible events for KPS that would result in a radiological dose beyond the exclusion area boundary that would exceed the Environmental Protection Agency's (EPA) Protective Action Guidelines (PAGs). Therefore, application of the requirements in 10 CFR 50.54(m) is not necessary to achieve the underlying purpose of this rule and special circumstances are present as defined in 10 CFR 50.12(a)(2)(ii).

- 2. Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. (10 CFR 50.12(a)(2)(iii))**

There are no design basis accidents or other credible events for KPS that would result in a radiological dose beyond the exclusion area boundary that would exceed the Environmental Protection Agency's (EPA) Protective Action Guidelines (PAGs). Therefore, application of the requirements in 10 CFR 50.54(m) would result in undue hardship and costs being incurred for the maintenance and implementation of a licensed operator training and qualification program. This program would be needed to maintain operators licensed under Part 55. Other licensees with permanently defueled plants, such as Zion and Millstone Unit 1, do not require operators licensed under Part 55 for shift staffing. The additional costs associated with maintaining a licensed operator training and qualification program would result in an unnecessary burden on the KPS decommissioning trust fund.

Therefore, compliance with the rule would result in an undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. Therefore, the special circumstances are present as defined in 10 CFR 50.12(a)(2)(iii).

#### **IV. ENVIRONMENTAL CONSIDERATION**

The proposed exemption meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(25), because the proposed exemption involves: (i) no significant hazards consideration; (ii) no significant change in the types or significant increase in the amounts of any effluent that may be released offsite; (iii) no significant increase in individual or cumulative occupational radiation exposure; (iv) no significant construction impact; (v) no significant increase in the potential for consequences from radiological accidents; and (vi) the requirements from which the exemption is sought involve requirements of an administrative, managerial, or organizational nature. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemption.

(i) **No significant hazards consideration**

DEK has evaluated the proposed exemption to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92 as discussed below:

**1. Does the proposed exemption involve a significant increase in the probability or consequences of an accident previously evaluated?**

The proposed exemption has no effect on plant systems, structures and components (SSCs) and no effect on the capability of any plant SSC to perform its design function. The proposed exemptions would not increase the likelihood of the malfunction of any plant SSC. The proposed exemptions would have no effect on the probability of consequences of any of the previously evaluated accidents in the KPS Updated Safety Analysis Report. Reliance on certified fuel handlers and non-licensed operators to perform on-shift staffing duties will not affect the probability of occurrence of any previously analyzed accident.

Therefore, the proposed exemptions do not involve a significant increase in the probability or consequences of an accident previously evaluated.

**2. Does the proposed exemption create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed exemption does not involve a physical alteration of the plant. No new or different type of equipment will be installed and there are no physical modifications to existing equipment associated with the proposed exemption. Similarly, the proposed exemption would not physically change any structures, systems or components involved in the mitigation of any accidents. Thus, no new initiators or precursors of a new or different kind of accident are created. Furthermore, the proposed exemption does not create the possibility of a new accident as a result of new failure modes associated with any equipment or personnel failures. No changes are being made to parameters within which the plant is normally operated, or in the setpoints which initiate protective or mitigative actions, and no new failure modes are being introduced.

Therefore, the proposed exemption does not create the possibility of a new or different kind of accident from any previously evaluated.

**3. Does the proposed exemption involve a significant reduction in a margin of safety?**

The proposed exemption does not alter the design basis or any safety limits for the plant. The proposed exemption does not impact station operation or any plant SSC that is relied upon for accident mitigation. The proposed exemption provides for qualified shift staffing requirements commensurate with the permanently shutdown and defueled status of the plant.

Therefore, the proposed exemption does not involve a significant reduction in a margin of safety.

Based on the above, DEK concludes that the proposed exemptions present no significant hazards consideration, and, accordingly, a finding of "no significant hazards consideration" is justified.

**(ii) There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.**

There are no expected changes in the types, characteristics, or quantities of effluents discharged to the environment associated with the proposed exemption. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of effluents released offsite. In addition, the method of operation of waste processing systems will not be affected by the exemptions. The proposed exemptions will not result in changes to the design basis requirements of SSCs that function to limit or monitor the release of effluents. All the SSCs associated with limiting the release of effluents will continue to be able to perform their functions. Therefore, the proposed exemptions will result in no significant change to the types or significant increase in the amounts of any effluents that may be released offsite.

**(iii) There is no significant increase in individual or cumulative occupational radiation exposure.**

The exemptions would result in no expected increases in individual or cumulative occupational radiation exposure on either the workforce or the public. There are no expected increases in normal occupational doses.

**(iv) There is no significant construction impact.**

There are no construction activities associated with the proposed exemptions.

**(v) There is no significant increase in the potential for consequences from radiological accidents.**

See the no significant hazards considerations discussion in item 1 above.

**(vi) The requirements from which exemptions are sought involve requirements of an administrative, managerial, or organizational nature.**

The underlying purpose of the requirements from which exemptions are sought is to ensure that all operating nuclear power units are adequately staffed with licensed personnel. These administrative requirements that ensure appropriate training and staffing levels for plant operators.

## **V. CONCLUSION**

Pursuant to the provisions of 10 CFR 50.12, "Specific exemptions," Dominion Energy Kewaunee, Inc. (DEK) is requesting exemptions 10 CFR 50.54(m) for Kewaunee Power Station (KPS).

Granting this exemption is consistent with the purpose underlying 10 CFR 50.54(m) as it: (1) would continue to fulfill the underlying purposes of the rule by allowing DEK to eliminate 10 CFR 50.54(m) requirements that on-site shifts be staffed with operators licensed under to 10 CFR 55 and allow on-site shifts to be staffed with certified fuel handlers and non-licensed operators, consistent with the proposed changes to the KPS Technical Specifications, and consistent with the permanently shutdown and defueled status of KPS; (2) would not result in significant environmental impacts not previously reviewed by the NRC; and (3) would not undermine the existing and continuing reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

This requested exemption is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security, and special circumstances are present as set forth in 10 CFR 50.12(a)(2).

## **References**

1. Letter from E. S. Grecheck (DEK) to NRC Document Control Desk, "License Amendment Request 256, Permanently Defueled License and Technical Specifications," dated May 29, 2013.
2. Letter from D. G. Stoddard (DEK) to NRC Document Control Desk, "Certification of Permanent Cessation of Power Operations," dated February 25, 2013. [ADAMS Accession No. ML13058A065]
3. Letter from Daniel G. Stoddard (DEK) to NRC Document Control Desk, "Certification of Permanent Removal of Fuel from the Reactor Vessel," dated May 14, 2013. (ADAMS Accession No. ML13135A209)

4. Letter from Paul A. Blasioli (DEK) to NRC Document Control Desk, "Request for Approval of Shift Manager / Certified Fuel Handler Training Program," dated June 17, 2013.
5. Federal Register, Nuclear Regulatory Commission, Final Rule, Licensed Operator Staffing at Nuclear Power Units; July 11, 1983 (48 FR 31611).
6. SECY-00-0145, Rulemaking Issue Notation Vote, "Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning," dated June 28, 2000.
7. Memorandum from William C. Huffman (NRC), "Transmittal of Report on Determination of Applicability of Title 10 of the Code of Federal Regulations to Decommissioning Nuclear Power Plants," dated July 7, 2000.